DISCUSSION

Health insurance coverage was made HP2010 objective 1-1 for a reason: access to health and medical services – including clinical preventive care, primary care, and tertiary care – largely depends on whether a person has health insurance. As demonstrated in many recent research studies, California has had lower health insurance coverage rates than most all other states.[13-15] Add to this some alarming news from the U.S. Census Bureau that the number of people living in "extreme poverty" (i.e., subsisting on less than half the income defined by the Federal government as the poverty line) is higher than at any time since they began collecting data 28 years ago, recent data from the U.S. Department of Labor's Consumer Expenditures Survey that show that health care costs continue to rise, and information from a recent Kaiser Foundation survey showing that about 5 million fewer jobs now provide health insurance than just three years ago, and you have the ingredients for disaster in the future of California's health care safety net and for the health status of its vulnerable and at-risk populations.[16-19]

Access to quality health care across the continuum of care is a key factor for mitigating the devastating effects diseases and injuries have on our population. Take heart disease for example, the leading cause of death among Californians. Success in reducing the burden of heart diseases is important for eliminating health disparities and for increasing the years of healthy life, and involves factors including blood pressure and cholesterol screenings, managing hypertension, health education on modifiable risks such as smoking and nutrition, and access to advanced medical technology used to treat cardiac events. The declines in the coronary heart disease death rates (Objective 12-1) and in hospitalization rates for congestive heart failure (Objective 12-6) in California continue, yet health insurance status constitutes a barrier to access for as many as six million Californians under the age of 65 who are uninsured. Over the years, funding for the California Healthcare for Indigents Program in 26 large California counties declined 85 percent from $163 million in FY 1997-98 to $25 million in FY 2003-04.[20] Much more needs to be done, and having the capability to examine heart disease data and other mortality and morbidity data by insurance status and/or socioeconomic status would do much toward increasing the power of these data to inform and direct public health policy and program practices.

Viewing California's progress in achieving HP2010 objectives in the context of poverty and health insurance coverage is only one way to examine these data. Another was is to look at it in the broader context of the sheer volume and demographic diversity of California's population. As the most populous and ethnically diverse state in the nation, California has a major influence on national health status statistics. In 2000 there were an estimated 34 million Californians, or about 12 percent of the total U.S. population - by the year 2050, there are projected to be 55 million Californians.[6] We have roughly the same proportion of males and females, and California is home to one-third of the U.S.

Hispanic/Latino population and one-third of the U.S. Asian population. Nearly one-quarter of those in the U.S. who identify themselves as "multiracial" (i.e., choosing two or more races on the Census questionnaire) reside in California.[21] Currently we have a relatively young population, with a median age of 33.3 years and an average life expectancy of 79 years.[22] In 2000, 11 percent of all Californians were age 65 and older – by the year 2050, however, it is projected that 18 percent of all Californians will be age 65 and older.

Embedded in these demographic changes is a dramatic increase in the prevalence of chronic health conditions (e.g., heart disease, cancer, diabetes, asthma, obesity, arthritis, hypertension, depression). With the projected growth in California's population, the need for care for chronic diseases and conditions will undoubtedly continue to increase. For the current health care system to adequately meet the challenge of providing clinically appropriate and cost-effective care for the chronically ill, its resources must be balanced well enough to address the complex health care demands of an aging and ethnically diverse population.[23-24]

Evidence shows that gender and racial and ethnic disparities in health status exist across a wide range of diseases and conditions, and that these remain even after adjustments are made for socioeconomic differences and other factors related to health care.[25] Health care quality is an important independent variable contributing to health status for many at-risk populations. For example, racial and ethnic disparities in malignant neoplasm (cancer) death rates correspond with evidence that use of potentially life-saving cancer screening procedures varies dramatically depending on race and ethnicity.[26-28] How the interplay between health care system utilization factors and membership in a racial or ethnic group will impact California's capabilities for achieving HP2010 goals and objectives are unknown, but potentially knowable. Continued analyses of mortality, morbidity, and utilization data by race-ethnicity and by gender will contribute much to our knowledge and understanding of the strengths and weaknesses of California's health care delivery system.

Finally, if one takes the view that the past is prologue, then another perspective on the HP2010 data for California would take its form and substance from the *Healthy California 2000 Final Review* and its predecessor reports, as well as other reports showing how California ranked nationally and regionally in the achievement of the HP2000 objectives.[29-36] The California final review for 2000, which tracked the state's progress in achieving 149 of the national health objectives, showed that we were successful in meeting 25 (54%) of the 46 general objectives targeting the entire population and 57 (55%) of the 103 objectives targeting selected age, gender, and race/ethnic populations. Overall, California achieved objectives targeting reductions in deaths attributed to coronary heart disease, cancer, alcohol-related motor vehicle accidents, suicide, unintentional injuries, work-related injuries, and infant deaths. Objectives not achieved included reductions in deaths attributed to stroke, diabetes-related

conditions, and homicide, as well objectives targeting persons living in counties not meeting EPA Air Quality Standards (California ranked 51st nationally), measles cases (ranked 50th), health insurance (ranked 45th), Pap tests (ranked 42nd), early childhood vaccinations (ranked 38th), teen births (ranked 36th), and early prenatal care (ranked 31st). Regional variations within California are striking, with many counties experiencing mortality and morbidity rates that significantly exceed both the statewide average and those targeted by the national HP2010 objectives. For example, data for 2000-2002 showed that none of California's 58 counties were meeting the HP2010 objective for reductions in deaths caused by suicide – among counties with reliable rates, suicide death rates ranged from a low of 6.3 per 100,000 population (San Mateo County) to a high of 19.9 (Humboldt County).[37] As the third leading cause of death among males aged 10-14, 15-19, 20-24, and 25-34 years, and the fourth leading cause among females aged 15-19, 20-24, 25-34, and 35-44 years, research-based interventions afford an opportunity to achieve major reductions in the burdens associated with suicides.[38]

While objective statistical interpretations can provide a wealth of information about how California is doing relative to a national objective and about how one demographic group is doing compared with another, subjective evaluations of these data can add a valuable qualitative dimension to this analysis. Thoughtfully used, statistics are powerful tools for abstracting information from complex situations. Yet we recognize that statistics can and do have limitations. As abstractions, they can take us away from the realities of individual circumstances and particular cases. As explanatory devices, they do often confuse more than clarify. As one writer put it, "…statistics should not be used as a substitute for sensitive judgments made by caring people."[39]

This collection of documents provides a useful framework for discussing critical issues and priorities for the future of public health in California, and these should not be overlooked as background for how California might fare in meeting the HP2010 goals and objectives. Balancing the quantitative and qualitative aspects of the data used for monitoring and tracking the HP2010 objectives is a challenge we all must face in making reasonable inferences from these data. To the extent possible, resources and references for obtaining additional information specific to California and specific to a Focus Area and to HP2010 objectives are provided throughout this report. Readers and users of the *Healthy California 2010* data are encouraged to explore these, as well as other sources of data and information, in their attempts to draw conclusions from them.[40]

REFERENCES

1. U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd edition, with Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, D.C.: U.S. Government Printing Office, November 2000.
2. California Department of Health Services. Leadership for a healthy California: A strategic plan for the California Department of Health Services. Sacramento, CA: CDHS, March 2002.
3. U.S. Department of Health and Human Services. *Tracking Healthy People 2010*. Washington, D.C.: U.S. Government Printing Office, November 2000.
4. Klein, R.J., et al. Healthy People 2010 criteria for data suppression. Statistical Notes, No. 24. Hyattsville, MD: National Center for Health Statistics, June 2002.
5. Interagency Committee for the Review of Standards for Data on Race and Ethnicity. Provisional guidance on the implementation of the 1997 standards for the collection of federal data on race and ethnicity. Washington, D.C.: Office of Management and Budget, December 15, 2000.
6. State of California. Population projections by race/ethnicity for California and its counties, 2000-2050. Sacramento, CA: Department of Finance, May 2004.
7. State of California. Population projections by race/ethnicity, gender and age for California and its counties, 2000-2050. Sacramento, CA: Department of Finance, Demographic Research Unit, May 2004.
8. Ingram, D.D., et al. United States Census 2000 population with bridged race categories. Vital and Health Statistics, Series 2, No. 135. Hyattsville, MD: National Center for Health Statistics, September 2003.
9. Klein, R.J. and Schoenborn, C.A. Age adjustment using the 2000 projected U.S. population. Statistical Notes, No. 20. Hyattsville, MD: National Center for Health Statistics, January 2001.
10. Curtin, L.R. and Klein, R.J. Direct standardization (age-adjusted death rates). Statistical Notes, No. 6 (revised). Hyattsville, MD: National Center for Health Statistics, March 1995.
11. Fleiss, J.L. Statistical Methods for Rates and Proportions. New York: John Wiley & Sons, 1981.
12. Kleinman, J.C. Mortality. Statistical Notes for Health Planners, No. 3. Hyattsville, MD: National Center for Health Statistics, 1977.
13. Brown, E.R., et al. The state of health insurance in California: Findings from the 2001 California Health Interview Survey. Los Angeles, CA: UCLA Center for Health Policy Research, 2002.
14. Holtby, S., et al. Health of California's adults, adolescents, and children: Findings from CHIS 2001. Los Angeles, CA: UCLA Center for Health Policy Research, 2004.

15. Cohen, R.A. and Coriaty-Nelson, Z. Health insurance coverage: Estimates from the National Health Interview Survey, 2003. Available at http://www.cdc.gov/nchs/nhis.htm
16. DeNavas-Walt, C., Proctor, B.D., and Mills, R.J. Income, poverty, and health insurance coverage in the United States, 2003. Current Population Reports, No. P60-226. Washington, D.C.: U.S. Government Printing Office, 2004.
17. Institute for the Future. The future of California's health care. San Francisco, CA: IFTF, 1997.
18. U.S. Census Bureau. Census Profile 2000: California. Available at http://www.census.gov/prod/2002pubs/c2kprof00-ca.pdf
19. U.S. Department of Labor. Consumer expenditures in 2002. Washington, D.C.: Bureau of Labor Statistics, Report No. 974, February 2004.
20. California Department of Health Services. Briefing paper on county financial maintenance of effort and county health services programs. Available at http://www.dhs.ca.gov/hisp/ochs/chsu/data.htm
21. Lundy, J., Finder, B., and Claxton, G. Trends and indicators in the changing health care marketplace, 2004 update. Menlo Park, CA: Kaiser Family Foundation, Pub. No. 7031, April 2004.
22. Ficenec, S. Abridged life tables for California, 2000. Data Summary No. DS02-06000. Sacramento, CA: California Department of Health Services, Center for Health Statistics, June 2002.
23. Institute of Medicine. The Future of the Public's Health. Washington, D.C.: The National Academies Press, 2003.
24. Institute of Medicine. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, D.C.: The National Academies Press, 2001.
25. Institute of Medicine. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. Washington, D.C.: The National Academies Press, 2002.
26. Sutocky, J.W. Sentinel health indicators for California's multicultural populations, 1999-2001. Sacramento, CA: California Department of Health Services, Center for Health Statistics, May 2004.
27. Sutocky, J.W. Trends in the leading causes of death: Gender disparities by race and ethnicity, California, 1990-2001. Sacramento, CA: California Department of Health Services, Center for Health Statistics, May 2004.
28. Babey, S.H., et al. Cancer screening in California: Racial and ethnic disparities persist. Los Angeles, CA: UCLA Center for Health Policy Research. September 18, 2003.
29. Richards, F. Healthy California 2000 final review. Sacramento, CA: California Department of Health Services, Center for Health Statistics, March 2004.
30. Richards, F. Healthy California 2000 midcourse review. Sacramento, CA: California Department of Health Services, Center for Health Statistics, June 1999.

31. Sutocky, J. Healthy California 2000: California's experience in achieving the national health promotion and disease prevention objectives. Sacramento, CA: California Department of Health Services, Center for Health Statistics, July 1995.
32. Dumbauld, S. California's progress in meeting the national health status objectives for 1990. Sacramento, CA: California Department of Health Services, Health Data and Statistics Branch, August 1987.
33. Dumbauld, S. Update of national health status objectives for 1990: An assessment of California. Sacramento, CA: California Department of Health Services, Center for Health Statistics, June 1984.
34. National Center for Health Statistics. Healthy People 2000 Final review. DHHS Publication No. 01-0256. Hyattsville, MD: Public Health Service, 2001.
35. Keppel, K.G. and Pearcy, J.N. Healthy People 2000: An assessment based on the health status indicators for the United States and each state. Statistical Notes, No. 19. Hyattsville, MD: National Center for Health Statistics, November 2000.
36. California Department of Health Services and California Conference of Local Health Officers. County health status profiles 2000. Sacramento, CA: Center for Health Statistics, April 2000.
37. California Department of Health Services and California Conference of Local Health Officers. County health status profiles 2004. Sacramento, CA: Center for Health Statistics, April 2004.
38. California Department of Health Services. Vital statistics of California, 2001. Sacramento, CA: Center for Health Statistics, April 2004.
39. Upton, R. "Some problems of thinking by numbers". Available at http://www.robinupton.com/research/publications/
40. Institute of Medicine. Informing the future: Critical issues in health, 2nd ed. Washington, D.C.: The National Academies Press, 2003.